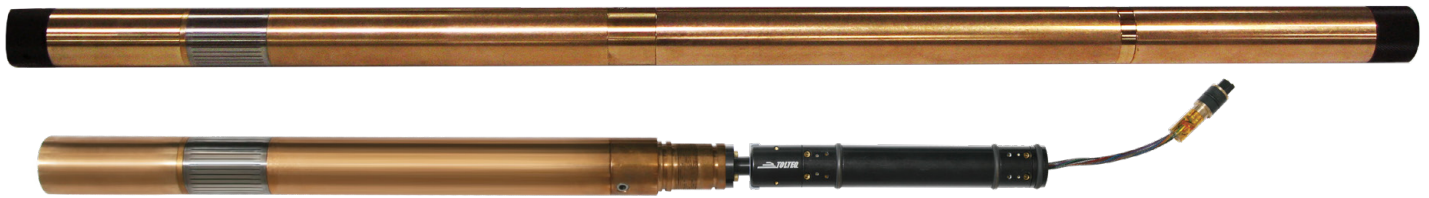


Tolteq iSeries Pulser Module (iTPM)

The Tolteq™ iSeries pulser module (iTPM) is a rugged and reliable retrievable pulser tool with a configurable design. The iTPM features extended battery life and a connection design that reduces or eliminates broken pins, while advanced electronics enable extensive logging and analysis through the Tool Tracker™ system. Fewer parts translates to simple maintenance, and an innovative screen design and high-temperature tolerance ensure the tool’s superior downhole reliability.



Features and Benefits

- Internal current consumption logged into memory
 - No capacitor bank
 - Eliminate noise in downhole tool electrical system
 - Incredible reliability, even in the toughest LCM environments
 - Enhanced circuit protection features
 - Interfaces with legacy MWD system
 - Simplified single-coil design
 - Operational time and environment recorded in internal memory*
 - Integrated three-axis digital flow switch
 - Shock and vibration monitoring and logging*
 - Firmware update via Internet
 - Flow switch values and performance logging*
 - Simple maintenance enables rapid teardown and rebuild times
 - Eliminates the maintenance-intensive bladder/bellow with a piston-based pressure compensation design
 - Quality Tolteq wiring inside with strain relief connectors and high-temperature mesh covering for wires
 - Up to 1.5 bps data transmission rates under ideal conditions
- *Requires Tool Tracker to download

Electrical Specifications

Operating voltage range.....20 to 30 V
 Current usage.....6 mA idle
 Battery life.....up to 400 operational hours

Physical Specifications

Length (w/caps).....45.83 in. (1164 mm)
 Diameter.....1.875 in. (48 mm)

Environmental Specifications

Operating temperature range.....32 to 347°F (0 to 175°C)
 Survival temperature.....-40 to 365°F (-40 to 185°C)
 Vibration, random.....20 g RMS, 15 to 500 Hz
 Shock.....1,000 g, 0.5 mSec., half-sine